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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,187	04/15/2004	Steven A. Bade	AUS920040034US1	7646
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IBM CORP (YA) C/O YEE & ASSOCIATES PC P.O. BOX 802333 DALLAS, TX 75380			EXAMINER GELAGAY, SHEWAYE	
			ART UNIT 2437	PAPER NUMBER
			NOTIFICATION DATE 01/07/2009	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ptonotifs@yeciipaw.com

### Office Action Summary

**Application No.**

10/825,187

**Applicant(s)**

BADE ET AL.

**Examiner**

SHEWAYE GELAGAY

**Art Unit**

2437

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 9/15/08.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 and 10-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 10-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

### **DETAILED ACTION**

1. This office action is in response to Applicant's amendment received on September 15, 2008. Applicant's election without traverse of Group 1 (claims 1-6 and 10-20) in the reply filed on 9/15/08 is acknowledged. Claims 7-9 are withdrawn. Claims 1-6 and 10-20 are pending.

### ***Response to Arguments***

2. Applicant's arguments filed August 15, 2007 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 recites "calculating a corresponding second hash value from the first hash value and a value or a register" and later "a final second hash value corresponding to a first hash value of the final audit record". The claimed language is indefinite because: It is recited that "second hash value is calculated from the first hash value" and later limitation recites "a final second hash value" which implies more than one "second hash values", however, if the second hash value is generated based on the first hash value there could be only one "second hash value".

Secondly, the limitation "a final second hash value corresponding to a first hash value" it is unclear if "a first hash value" recited line 10 is the same first hash value recited in 7.

3. Claim 1 provides for the use of "a final second hash value", but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 1 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

4. Claims 2-6 are also rejected for being dependent on a rejected claim.

### ***Claim Rejections - 35 USC § 101***

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 10-15 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claims 10-15 are drawn to functional descriptive material recorded on computer-readable medium. The specification, on page 24 recites that "Examples of communication media includes... transmission media, such

as digital and analog communications links using transmission forms." Communication media typically embody computer readable instructions, data structures, program modules or other data in a modulated data signal such as a carrier wave or other transport mechanism and include any information delivery media is neither a process nor a product and therefore does not fall within one of the four statutory classes of § 101. Because the full scope of the claim as properly read in light of the disclosure encompasses non-statutory subject matter, the claim as a whole is non-statutory.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-6 and 10-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schneier et al. (hereinafter Schneier) US Patent Number 5,978,475 in view of Aissi et al. (hereinafter Aissi) US 7,373,509 in view of Schneck et al. (hereinafter Schneck) US 6,208,986 and in view of Borthauker et al. (hereinafter Borthauker) US 2005/0114406.

As per claims 1, 10 and 16:

Schneier teaches a method of logging audit events in a data processing system, the method comprising the computer implemented steps of:

writing a sequence of audit records including a final audit record to a first log file stored by a data processing system; (figure 3, col. 7, lines 1-25)

calculating a respective first hash value of each audit record; (figure 3)  
responsive to calculating each respective first hash value, calculating a  
corresponding second hash value from the first hash value (col. 10, lines 16-35)  
writing the second hash value to the register; (col. 10, lines 16-35)  
responsive to closing the first log file, opening a second log file; (col. 7, lines 1-  
18) and  
writing, to a first record of the second log file. (col. 10, line 64-col. 11, line 54)

In addition Schneier further discloses entries are stored in the audit log in  
sequential order. Each entry in the audit log contains the one-way hash of the previous  
entry. This enables the auditor to verify that every entry was written into the log after the  
previous entry before subsequent entry. Any attempt to delete entries, add entries, or  
modify entries in the middle of the log will be immediately noticed because the one-way  
hash function values will no longer be valid. (col. 3, lines 10-18)

Schneier does not explicitly disclose calculating a corresponding second hash  
value from a value of a register associated with the data processing system and writing  
the second hash value to the register; responsive to closing the first log file, opening a  
second log file; and writing a final second hash value corresponding to a first hash value  
of the final audit record.

Aissi in analogous art, however, discloses calculating a corresponding second  
hash value from a value of a register associated with the data processing system and  
writing the second hash value to the register. (col. 9, line 6-col. 10, line 37; col. 15, line  
40-col. 18, line 31; col. 19, line 6-col. 20, line 50) Therefore it would have been obvious

to one ordinary skill in the art to modify the method disclosed by Schneier with Aissi in order to have a trusted platform module that provides an increased confidence and that enables enhancement of auditing and logging (col. 1, lines 25-31; Grawrock)

Both references do not explicitly disclose responsive to closing the first log file, opening a second log file. Schneck in analogous art, however, discloses responsive to closing the first log file, opening a second log file. (col. 15, lines 36-46) Therefore it would have been obvious to one ordinary skill in the art to modify the method disclosed by Schneier and Aissi with Schneck in order to write a specified number of records to a log file before closing that log file and creating a new one. (col. 15, lines 45-47; Schneck)

None of the references explicitly disclose writing to a second file a final second hash value corresponding to a first hash value of the final audit record. Borthauker in analogous art, however, discloses writing to a second file a final second hash value corresponding to a first hash value of the final audit record. (page 8, pp.76) Therefore it would have been obvious to one ordinary skill in the art to modify the method disclosed by Schneier, Aissi and Schneck with Borthauker in order to determine if the first file is an ancestor of the second file. (page 8, pp.76; Borthauker)

As per claims 2, 12-13 and 17:

The combination of Schneier, Aissi, Schneck and Borthauker teaches all the subject matter as discussed above. In addition, Schneier further teaches a method comprising: generating a cryptographically signed value of the final second hash value;

and writing the signed value to the first record of the second log file. (col. 10, line 64-col. 11, line 54)

As per claims 3 and 19:

The combination of Schneier, Aissi, Schneck and Borthauker teaches all the subject matter as discussed above. In addition, Schneier further teaches a method wherein the signed value is generated using an identity of a trusted platform module of the data processing system. (col. 9, line 34-col. 10, line 25)

As per claims 4 and 14:

The combination of Schneier, Aissi, Schneck and Borthauker teaches all the subject matter as discussed above. In addition, Schneier further teaches a method wherein each respective first hash value and corresponding second hash value are calculated from a US secure hashing algorithm-1. (col. 9, line 3-15)

As per claims 5, 11, 15 and 20:

The combination of Schneier, Aissi, Schneck and Borthauker teaches all the subject matter as discussed above. In addition, Schneier further teaches a method wherein writing the second hash value further comprises: performing an extend function, wherein the first hash value is included as an operand of an extend function call. (col. 10, lines 16-35) Aissi further discloses the register is a platform configuration register. (col. 9, line 6-col. 10, line 37; col. 15, line 40-col. 18, line 31; col. 19, line 6-col. 20, line 50)

As per claims 6 and 18:



The combination of Schneier, Aissi, Schneck and Borthauker teaches all the subject matter as discussed above. In addition, Aissi further teaches a method wherein calculating a corresponding second hash further comprises: concatenating the register value with the first hash value; and calculating the second hash value from a result of concatenating the register value with the first hash value. (col. 9, line 6-col. 10, line 37; col. 15, line 40-col. 18, line 31; col. 19, line 6-col. 20, line 50)

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHEWAYE GELAGAY whose telephone number is (571)272-4219. The examiner can normally be reached on 8:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on 571-272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Examiner, Art Unit 2437

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